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MICHIGAN ASPARAGUS SURVEY

1977

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LEWIS CASS BUILDING, P. O. Box 30017
LANSING, MICHIGAN 48909

B. DALE BALL, Director

December 1977

Dear Friend:

The asparagus industry is an important segment of Michigan's agricultural economy. Among other findings this survey found that asparagus accounts for the second largest acreage of any vegetable crop grown in the State, trailing only cucumbers for pickles. Michigan asparagus growers realize nearly $7 million in cash receipts for this crop every year. It is pleasing to see how this important industry has prospered. It is an important asset to the producers and citizens of Michigan. It is a growth industry in that much of the acreage planted in the early 1970's is now coming into prime production.

We hope the data presented in this publication will assist the entire asparagus industry as it plans for the future. It is with pleasure that we present to you the latest details on this important facet of Michigan agriculture.

Sincerely,

B. Dale Ball

B. Dale Ball, Director

MICHIGAN
THE GREAT LAKE STATE

MICHIGAN ASPARAGUS SURVEY

1977

MICHIGAN CROP REPORTING SERVICE
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United States
Department of Agriculture
Statistical Reporting Service

cooperating

Michigan
Department of Agriculture
Marketing Division

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INTRODUCTION

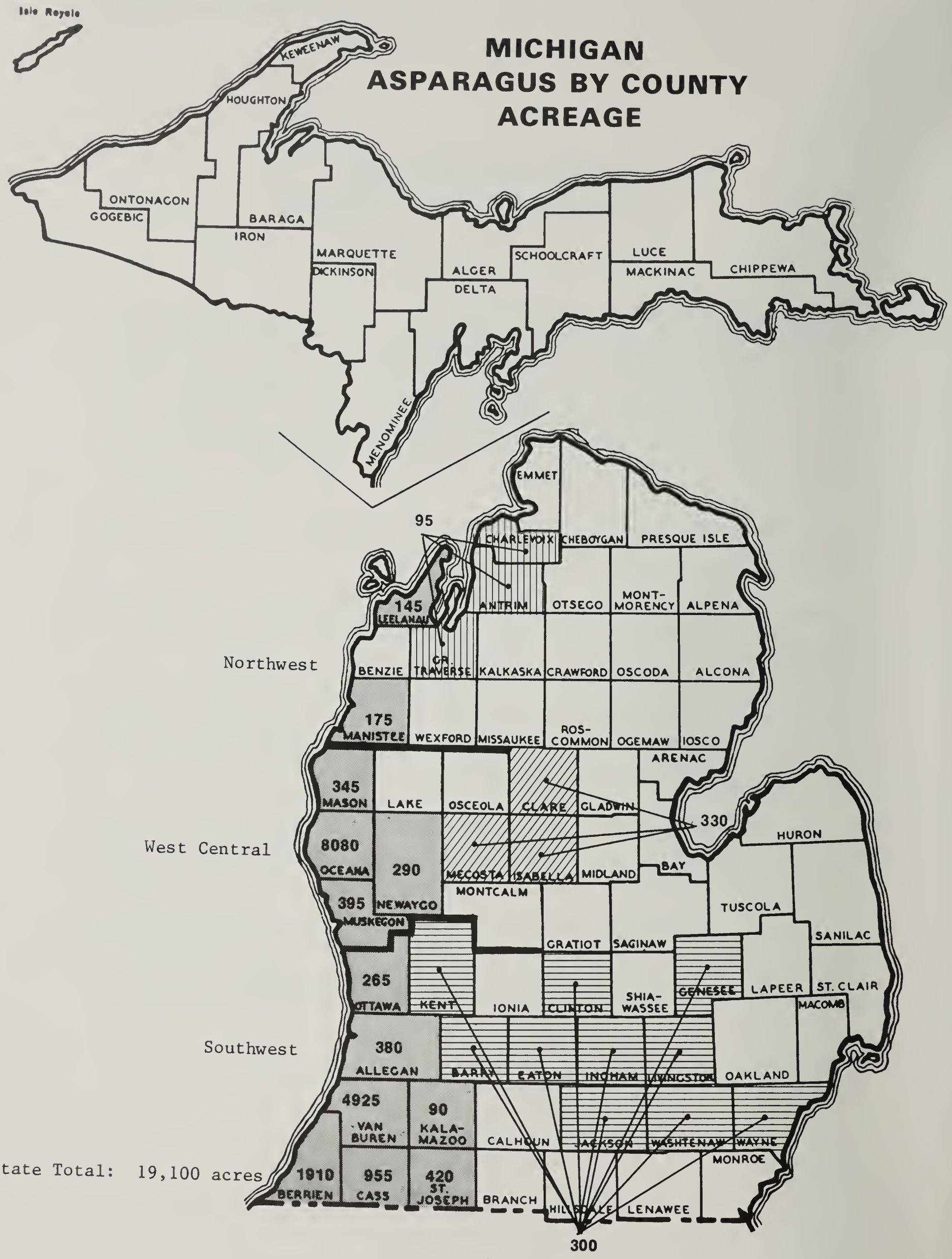
A survey of the Michigan Asparagus Industry was conducted to obtain data and provide information on the current production and marketing features of asparagus in the State. Other important objectives were to identify areas of production, obtain information on age of asparagus and plant population per acre, plus providing data on methods of harvest. This bulletin is published in an attempt to provide growers, processors, and handlers with current data to assist in arriving at decisions on future programs and methods to further develop the asparagus industry in Michigan.

Several spring frosts were a detriment to the crop this season and caused some acreage not to be harvested. Yields would have been higher, but growers lost some pickings due to frosts.

A list of every known asparagus grower in the State was compiled using all available sources. Just over 2,100 questionnaires were mailed to possible producers after the asparagus harvest was completed in June 1977. Growers not responding were mailed a second questionnaire. If no response was received from the individual, follow-up interviews were obtained either by telephone or personal contact. Of the 2,100 original producers, only about 1,200 were found to operate a commercial asparagus operation. For an operation to qualify as commercial, it must have at least one acre of asparagus planted.

Of the 2,100 plus reports over 40 percent had sold their farms or had never grown asparagus. Almost 2 percent of the respondents had less than 1 acre planted and just over 1 percent indicated they were not interested in providing information about their asparagus business.

Data was adjusted using county and size group averages to include growers possibly missed and refusals. This was done in order to derive as complete and accurate totals as possible. In most instances, data was rounded in the tables and text for ease in computation and publication.


MICHIGAN
ASPARAGUS BY COUNTY
ACREAGE
Isle Royale
KEWEENAW
HOUGHTON
ONTONAGON
GOGEBIC
BARAGA
IRON
MARQUETTE
DICKINSON
ALGER
DELTA
SCHOOLCRAFT
LUCE
MACKINAC
CHIPPEWA
MENOMINEE
EMMET
95
CHARLEVOIX
CHEBOYGAN
PRESQUE ISLE
145
LEELANAU
ANTRIM
OTSEGO
MONT-
MORENCY
ALPENA
Northwest
BENZIE
GR. TRAVERSE
KALKASKA
CRAWFORD
OSCODA
ALCONA
175
MANISTEE
WEXFORD
MISSAUKEE
ROS-
COMMON
OGEMAW
IOSCO
ARENAC
345
MASON
LAKE
OSCEOLA
CLARE
GLADWIN
330
HURON
West Central
8080
OCEANA
290
MECOSTA
ISABELLA
MIDLAND
BAY
MONTCALM
395
NEWAYGO
MUSKEGON
TUSCOLA
SANILAC
GRATIOT
SAGINAW
265
OTTAWA
KENT
IONIA
CLINTON
SHIA-
WASSEE
GENESEE
LAPEER
ST. CLAIR
MACOMB
Southwest
380
ALLEGAN
BARRY
EATON
INGHAM
LIVINGSTON
OAKLAND
4925
VAN
BUREN
90
KALA-
MAZOO
CALHOUN
JACKSON
WASHTENAW
WAYNE
MONROE
State Total: 19,100 acres
1910
BERRIEN
955
CASS
420
ST.
JOSEPH
BRANCH
HILLSDALE
LENAWEE
300

ACREAGE AND PRODUCTION

Almost 93 percent, (17,760 acres), of the State's total asparagus acres were reported of harvesting age in 1977 and 7 percent, (1,340 acres), were non-bearing. Of the total acres of harvesting age, 97 percent, (17,300 acres), was harvested, while 3 percent, (460 acres), was not harvested for economic reasons, such as labor shortages, low yields, etc.

Production of asparagus in Michigan in 1977 totaled 19,000,000 pounds with 54 percent in the west central district, 44 percent in the southwest district and only 2 percent in the northwest district.

Production in the west central district was primarily in Oceana County, while Van Buren and Berrien counties were the major producing counties in the southwest district.

ACREAGE, BY COUNTY

COUNTY AND DISTRICT	Total acres	Acres of harvesting age		Non-bearing
		Harvested	Not harvested for economic reasons	
Leelanau	145	125	5	15
Manistee	175	120	0	55
Other Counties 1/	80	80	0	0
NORTHWEST	400	325	5	70
Mason	345	315	0	30
Muskegon	395	375	0	20
Newaygo	290	270	0	20
Oceana	8,080	7,510	0	570
Other Counties 2/	325	295	0	30
WEST CENTRAL	9,435	8,765	0	670
Allegan	380	350	0	30
Berrien	1,910	1,670	125	115
Cass	955	855	95	5
Kalamazoo	90	80	5	5
Ottawa	265	245	0	20
St. Joseph	420	385	30	5
Van Buren	4,925	4,365	200	360
Other Counties 3/	320	260	0	60
SOUTHWEST	9,265	8,210	455	600
STATE TOTAL	19,100	17,300	460	1,340

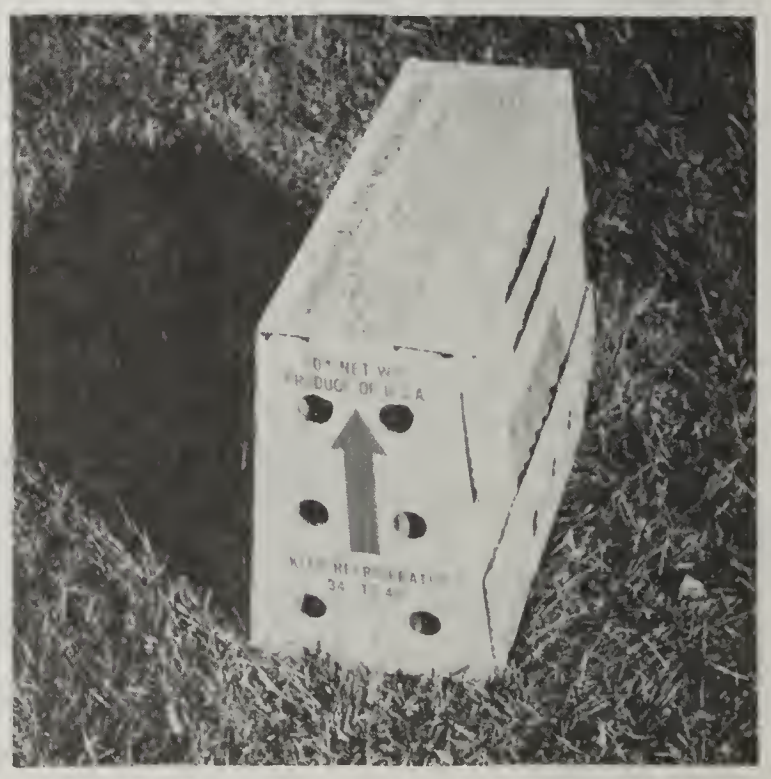
1/ Includes Antrim, Charlevoix, and Grand Traverse.
2/ Includes Clare, Isabella, and Mecosta.
3/ Includes Berry, Clinton, Eaton, Genesee, Ingham, Jackson, Kent, Livingston, Washtenaw, and Wayne.

GROWERS, ACREAGE, AND PRODUCTION, BY COUNTY

COUNTY AND DISTRICT	Number of growers		Harvested acres	Production	
	Number	Percent		Per acre	Total
				Pounds	
Leelanau	9	0.8	125	1,005	125,565
Manistee	6	0.5	120	2,085	250,365
Other Counties	15	1.2	80	360	28,895
NORTHWEST	30	2.5	325	1,245	404,825
Mason	23	1.9	315	1,300	409,500
Muskegon	28	2.3	375	1,020	382,500
Newaygo	14	1.2	270	955	257,850
Oceana	315	26.2	7,510	1,190	8,936,900
Other Counties	8	0.7	295	1,065	314,410
WEST CENTRAL	388	32.3	8,765	1,175	10,301,160
Allegan	25	2.1	350	1,280	448,000
Berrien	193	16.1	1,670	990	1,653,300
Cass	39	3.3	855	1,035	884,925
Kalamazoo	17	1.4	80	890	71,040
Ottawa	18	1.5	245	695	169,680
St. Joseph	9	0.8	385	1,420	546,700
Van Buren	465	38.7	4,365	935	4,081,275
Other Counties	16	1.3	260	1,690	439,095
SOUTHWEST	782	65.2	8,210	1,010	8,294,015
STATE TOTAL	1,200	100.0	17,300	1,100	19,000,000

YIELD

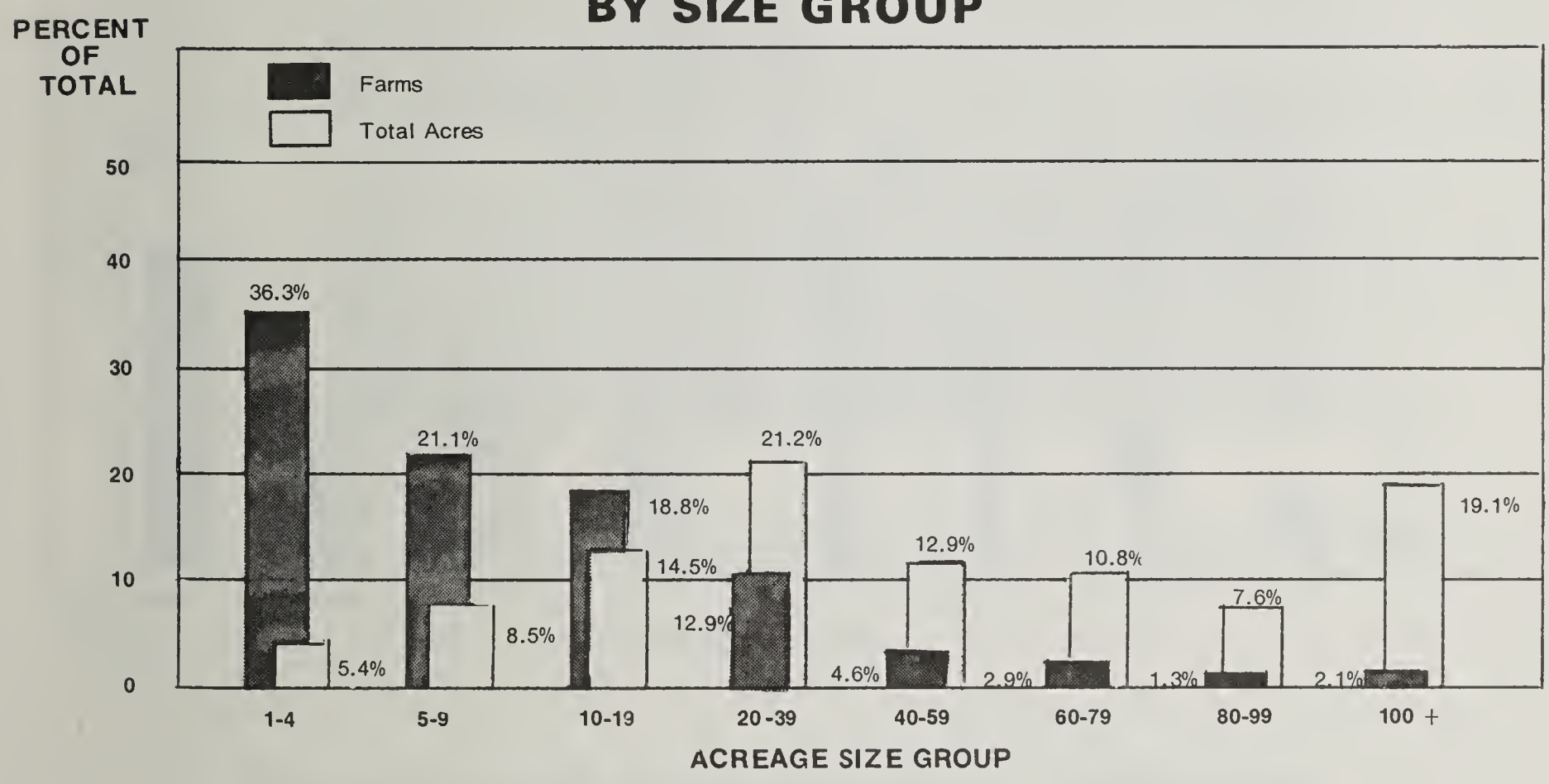
The average yield per acre varied among districts. The west central district had yields of 1,175 pounds per acre while yields in the southwest district averaged 1,010 pounds per acre, and in the northwest averaged 1,245 pounds per acre. The State average yield was 1,100 pounds per acre.



TOP FIVE ASPARAGUS PRODUCING COUNTIES

COUNTY	Harvested acreage	Production	Percent of State total
		Pounds	
1. Oceana	7,510	8,936,900	47.0
2. Van Buren	4,365	4,081,275	21.5
3. Berrien	1,670	1,653,300	8.7
4. Cass	855	884,925	4.7
5. St. Joseph	385	546,700	2.9
TOTAL 5 COUNTIES	14,785	16,103,100	84.8

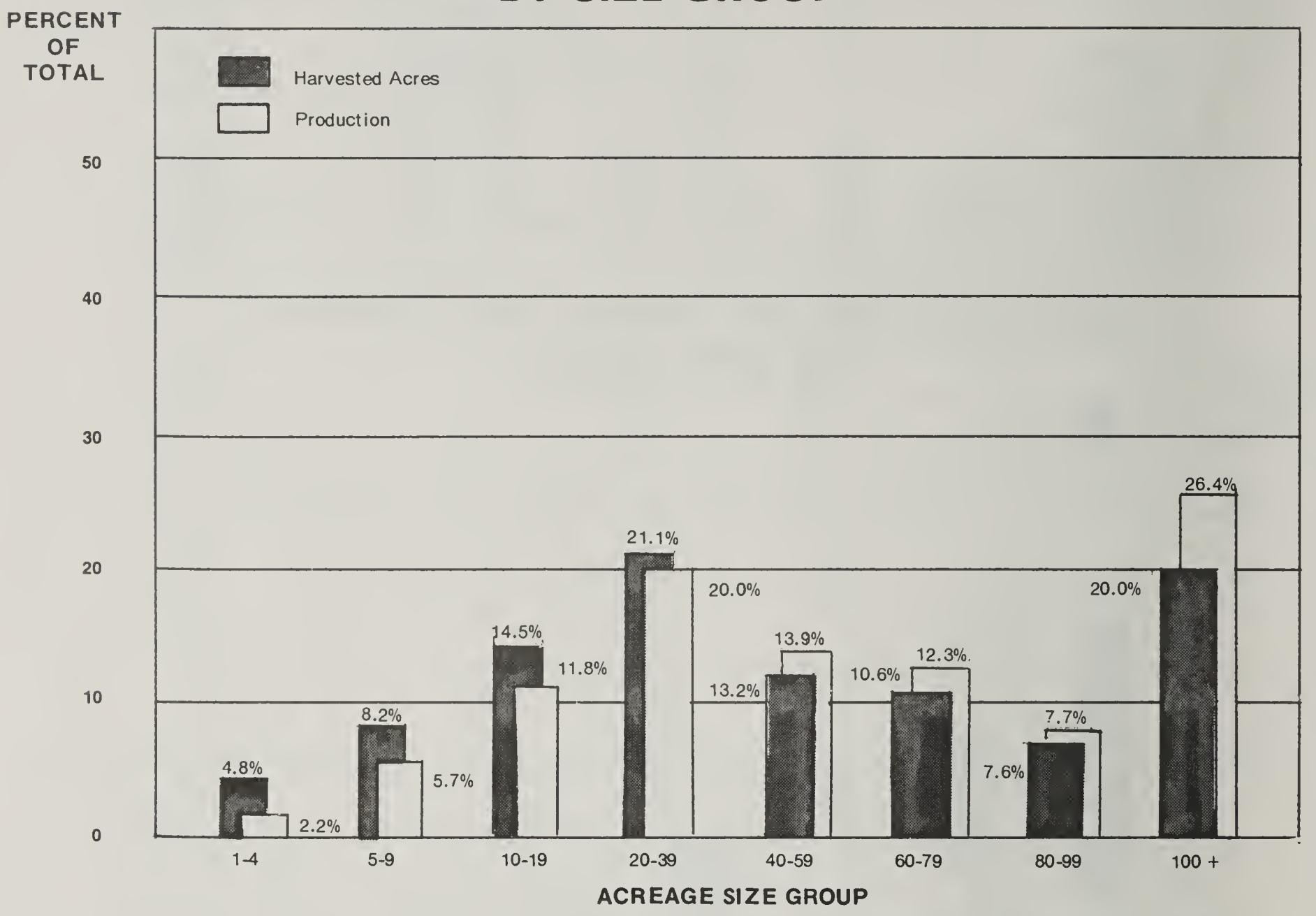
DISTRIBUTION OF FARMS AND ACREAGE, BY SIZE GROUP



ACREAGE, BY SIZE GROUP

ACREAGE SIZE GROUPS	Total acres	Acres of harvesting age		Non-bearing
		Harvested	Not harvested for economic reasons	
1 - 4	1,030	835	160	35
5 - 9	1,625	1,410	100	115
10 - 19	2,760	2,515	70	175
20 - 39	4,050	3,655	50	345
40 - 59	2,460	2,290	35	135
60 - 79	2,055	1,825	5	225
80 - 99	1,465	1,310	25	130
100 or more	3,655	3,460	15	180
TOTAL	19,100	17,300	460	1,340

DISTRIBUTION OF ACREAGE AND PRODUCTION, BY SIZE GROUP



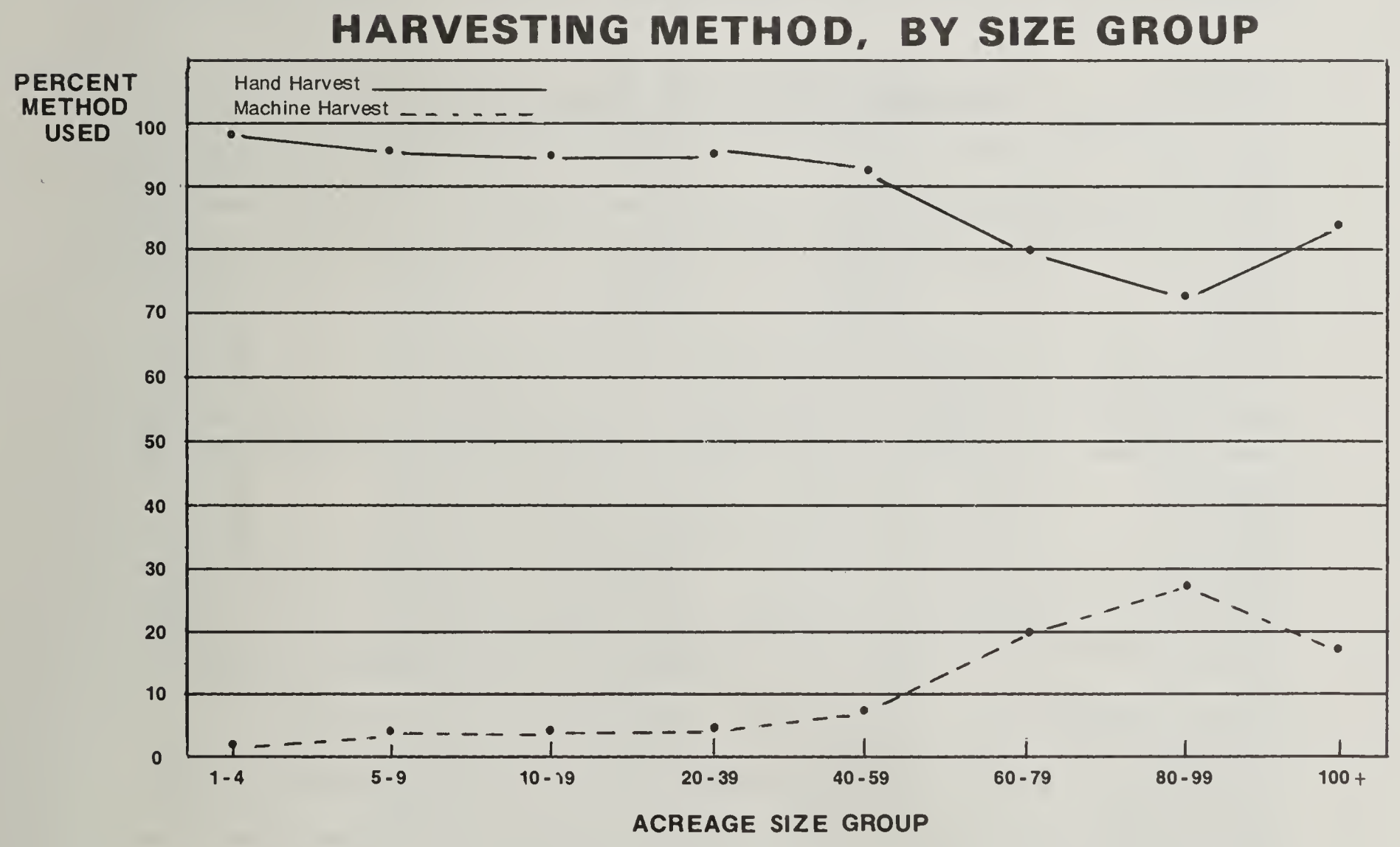
GROWERS, ACREAGE, AND PRODUCTION, BY SIZE GROUP

ACREAGE SIZE GROUPS	Number of growers		Harvested acres	Production	
	Number	Percent		Per acre	Total
				Pounds	
1 - 4	435	36.2	835	505	421,970
5 - 9	255	21.2	1,410	765	1,077,965
10 - 19	225	18.8	2,515	885	2,230,830
20 - 39	155	12.9	3,655	1,040	3,805,340
40 - 59	55	4.6	2,290	1,155	2,648,165
60 - 79	35	2.9	1,825	1,280	2,334,305
80 - 99	15	1.3	1,310	1,115	1,460,055
100 or more	25	2.1	3,460	1,450	5,021,370
TOTAL	1,200	100.0	17,300	1,100	19,000,000

HARVESTING METHOD

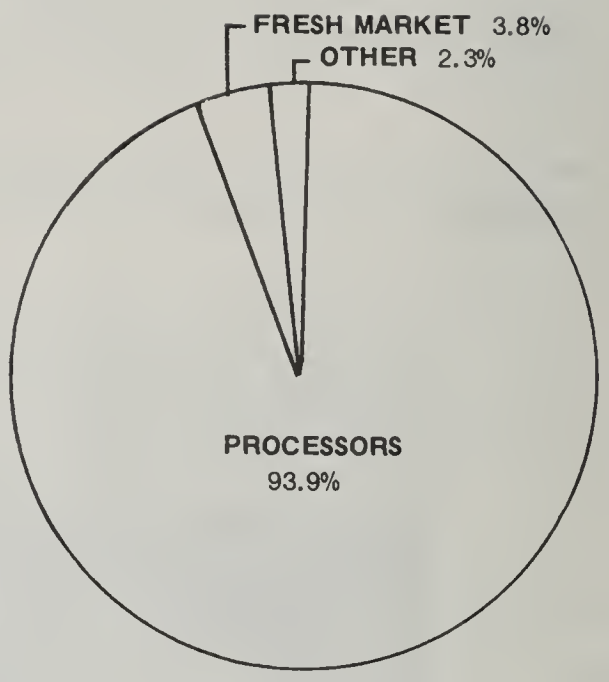
Each district averaged 95-96 percent of the crop hand harvested and 4-5 percent machine harvested. Leelanau County had the highest percent of crop machine harvested with 13 percent machine-picked while the "Other Counties" in that district had 22 percent machine harvested.

On a size group basis, generally, as the size of asparagus acreage increased, the percent of crop machine harvested increased.



UTILIZATION

About 94 percent of the total asparagus produced in the State in 1977 was sold to processors. Approximately 4 percent was sold to fresh markets, and about 2 percent was used for other purposes.



DISPOSITION

UTILIZATION, BY COUNTY

COUNTY AND DISTRICT	Total production	Disposition		
		Processors	Fresh Market	Other 1/
	Pounds			
Leelanau	125,565	68,055	57,510	--
Manistee	250,365	213,560	33,300	3,505
Other Counties	28,895	11,850	10,545	6,500
NORTHWEST	404,825	293,465	101,355	10,005
Mason	409,500	407,860	--	1,640
Muskegon	382,500	285,345	65,790	31,365
Newaygo	257,850	249,085	4,125	4,640
Oceana	8,936,900	8,758,160	107,245	71,495
Other Counties	314,410	272,910	17,920	23,580
WEST CENTRAL	10,301,160	9,973,360	195,080	132,720
Allegan	448,000	418,430	28,225	1,345
Berrien	1,653,300	1,540,875	67,785	44,640
Cass	884,925	868,995	4,425	11,505
Kalamazoo	71,040	50,510	2,200	18,330
Ottawa	169,680	53,450	111,140	5,090
St. Joseph	546,700	443,375	16,950	86,375
Van Buren	4,081,275	3,824,155	179,575	77,545
Other Counties	439,095	310,880	16,245	111,970
SOUTHWEST	8,294,015	7,510,670	426,545	356,800
STATE TOTAL	19,000,000	17,777,495	722,980	499,525

1/ Roadside stands, pick-your-own, etc.

UTILIZATION, BY SIZE GROUP

ACREAGE SIZE GROUPS	Total production	Disposition		
		Processors	Fresh Market	Other 1/
	Pounds			
1 - 4	421,970	346,915	49,975	25,080
5 - 9	1,077,965	942,085	81,145	54,735
10 - 19	2,230,830	2,023,010	152,260	55,560
20 - 39	3,805,340	3,519,075	206,250	80,015
40 - 59	2,648,165	2,509,650	127,580	10,935
60 - 79	2,334,305	2,261,070	30,460	42,775
80 - 99	1,460,055	1,406,965	24,910	28,180
100 or more	5,021,370	4,768,725	50,400	202,245
TOTAL	19,000,000	17,777,495	722,980	499,525

1/ Roadside stands, pick-your-own, etc.

ACREAGE AND AGE OF PLANTINGS

The asparagus acreage found in Michigan in the 1977 survey totaled 19,100 acres. There were 350 acres of new plantings in 1977 for almost 2 percent of the total. The 1976 planted acres totaled 395 for just over 2 percent, while the 1975 acreage was 645 or just over 3 percent. On a Statewide basis, over 40 percent was planted between 1962 and 1971, while 25 percent was planted between 1972 and 1974. Another 23 percent was planted before 1962. Almost 70 percent of the asparagus in the State is of prime production age. The same situation existed in the southwest and west central districts, while the northwest district had a relatively larger percentage of young asparagus.

ACREAGE AND AGE OF PLANTINGS, BY COUNTY

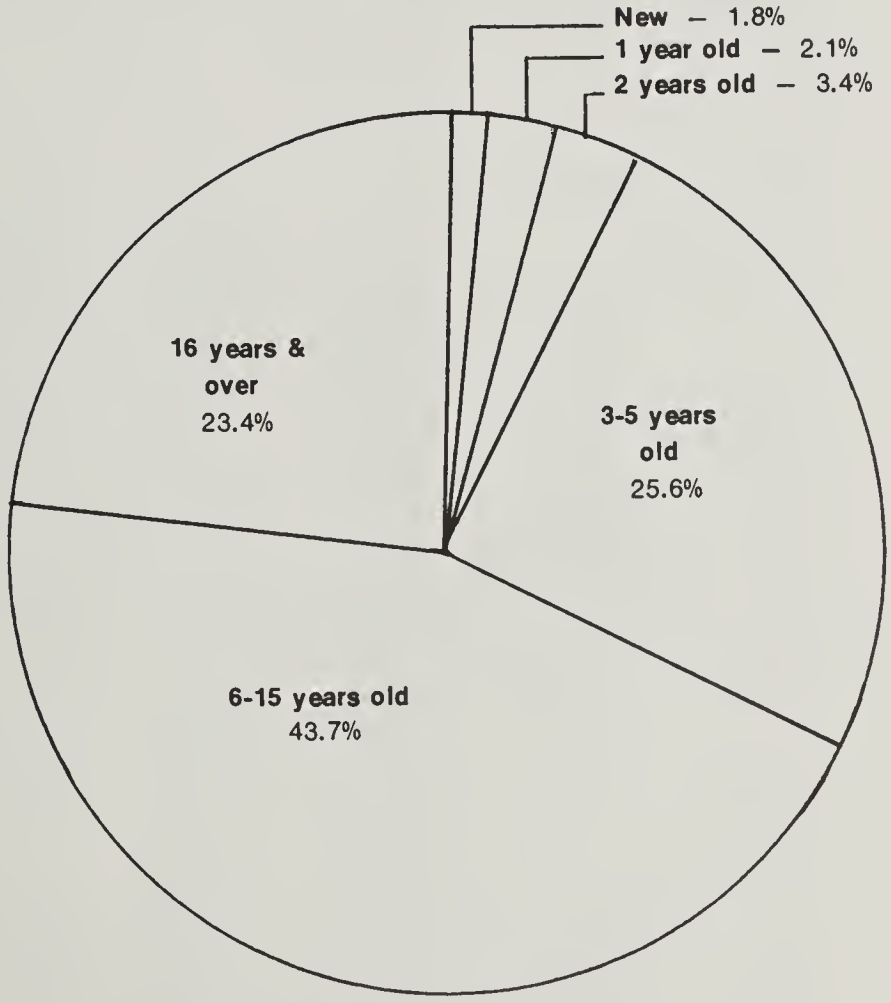
COUNTY AND DISTRICT	Acres planted in:						
	1977	1976	1975	1972-74	1962-71	Before 62	Total
Leelanau	15	--	--	15	60	55	145
Manistee	5	25	25	55	60	5	175
Other Counties	--	--	--	15	35	30	80
NORTHWEST	20	25	25	85	155	90	400
Mason	5	5	35	165	115	20	345
Muskegon	5	15	15	85	210	65	395
Newaygo	15	--	5	80	55	135	290
Oceana	135	160	290	2,505	3,640	1,350	8,080
Other Counties	--	25	5	20	250	25	325
WEST CENTRAL	160	205	350	2,855	4,270	1,595	9,435
Allegan	25	5	5	40	135	170	380
Berrien	45	30	40	275	905	615	1,910
Cass	--	5	--	220	440	290	955
Kalamazoo	--	--	5	15	40	30	90
Ottawa	5	5	10	70	125	50	265
St. Joseph	5	--	--	235	105	75	420
Van Buren	55	120	185	965	2,055	1,545	4,925
Other Counties	35	--	25	125	120	15	320
SOUTHWEST	170	165	270	1,945	3,925	2,790	9,265
STATE TOTAL	350	395	645	4,885	8,350	4,475	19,100

ACREAGE AND AGE OF PLANTINGS, BY SIZE GROUP

ACREAGE SIZE GROUPS	Acres planted in:						
	1977	1976	1975	1972-74	1962-71	Before 62	Total
1 - 4	5	10	20	160	325	510	1,030
5 - 9	20	5	90	350	570	590	1,625
10 - 19	20	40	115	775	1,135	675	2,760
20 - 39	80	115	150	970	1,910	825	4,050
40 - 59	40	40	55	755	985	585	2,460
60 - 79	65	80	80	585	975	270	2,055
80 - 99	20	50	40	335	555	465	1,465
100 or more	100	55	95	955	1,895	555	3,655
TOTAL	350	395	645	4,885	8,350	4,475	19,100

ACREAGE, BY AGE GROUP

The smaller size groups had a larger percentage of their acreage in the older age groups than the larger growers. The middle age groups seemed to be where the larger growers had most of their acreage. These middle age groups are also the prime producing groups.



DENSITY OF CROWNS

The density of crowns planted, as reported by farmers in each county, ranged from a low of about 4,500 per acre to 14,300 per acre depending on the age of plantings. In each age group, the densities were different from one county to another and was also different from one district to another. Results from the survey indicated that the density of crowns for the State average increased from 7,755 per acre planted before 1962 to 10,445 per acre planted in 1977 with the peak reached in 1976 when the average planted was 10,670. The increase has been steadily upward until 1977.

DENSITY OF CROWNS PLANTED, BY COUNTY

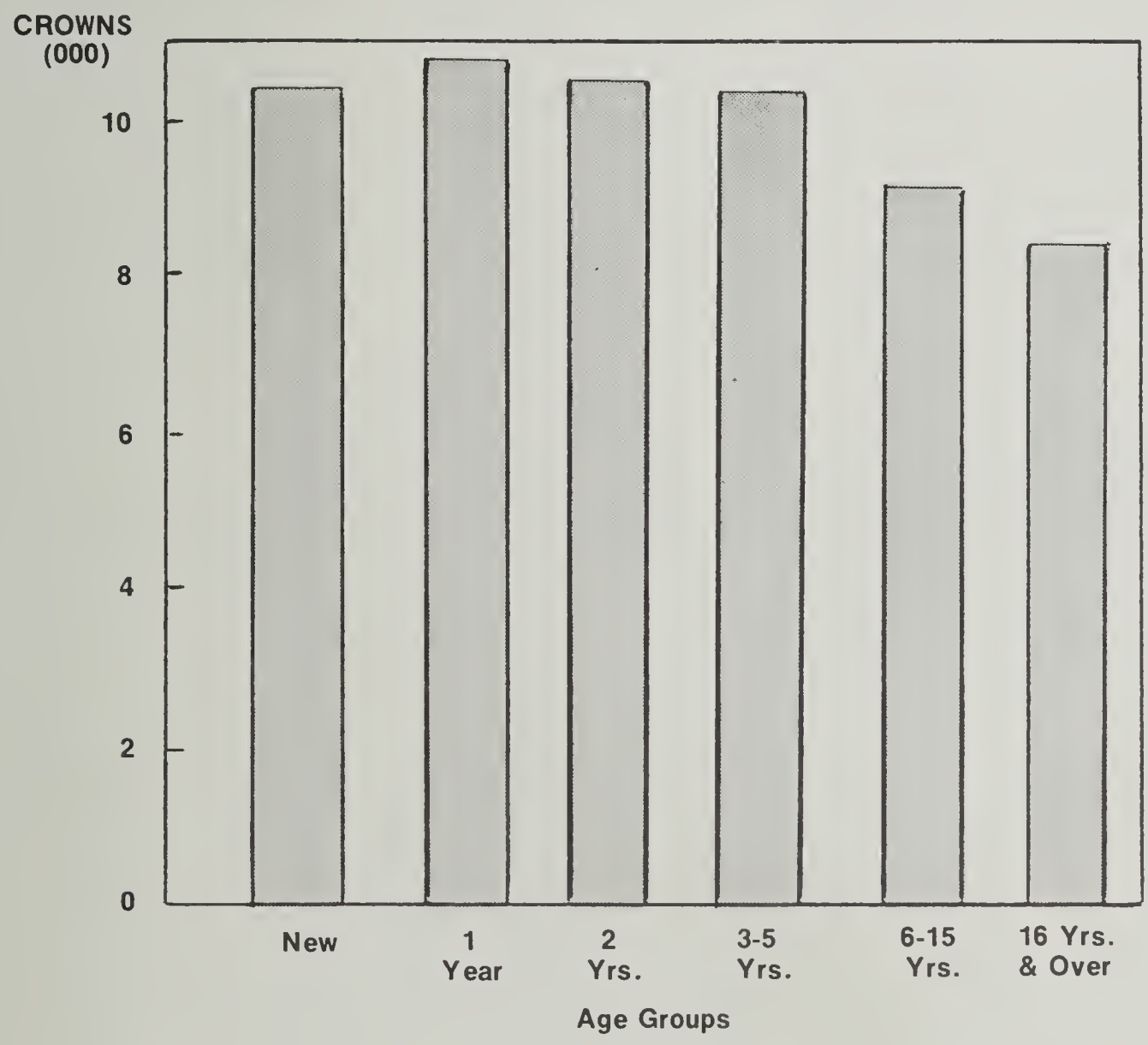
COUNTY AND DISTRICT	Average crowns per acre planted in:					
	1977	1976	1975	1972-74	1962-71	Before 62
Leelanau	11,875	--	--	14,286	9,500	--
Manistee	10,000	--	6,000	13,667	10,000	--
Other Counties	--	--	--	--	10,000	--
NORTHWEST	11,405	--	6,000	13,800	9,805	--
Mason	10,000	10,000	10,217	10,304	9,087	8,000
Muskegon	5,000	8,500	8,375	11,205	9,145	5,000
Newaygo	--	--	9,000	10,231	10,789	6,000
Oceana	10,708	10,750	11,312	10,649	9,488	7,167
Other Counties	--	14,000	12,000	10,000	10,000	9,826
WEST CENTRAL	10,485	10,965	11,055	10,630	9,505	7,030
Allegan	8,588	--	--	9,878	7,300	7,733
Berrien	10,750	10,385	9,298	8,478	8,368	9,138
Cass	--	--	--	7,846	6,087	10,000
Kalamazoo	--	--	10,000	5,000	4,522	8,000
Ottawa	5,400	--	--	11,485	13,857	14,267
St. Joseph	--	--	--	10,000	7,800	6,227
Van Buren	10,000	9,883	10,149	10,388	8,742	6,760
Other Counties	11,000	--	10,000	9,862	--	--
SOUTHWEST	9,790	9,985	9,865	9,735	8,395	7,820
STATE AVERAGE	10,445	10,670	10,620	10,480	9,155	7,755

DENSITY OF CROWNS PLANTED, BY SIZE GROUPS

ACREAGE SIZE GROUPS	Average crowns per acre planted in:					
	1977	1976	1975	1972-74	1962-71	Before 62
1 - 4	5,400	10,000	11,355	8,875	7,575	5,080
5 - 9	8,835	12,000	7,770	9,850	7,915	5,135
10 - 19	6,305	6,875	8,620	10,900	9,095	8,365
20 - 39	10,080	10,475	10,220	10,480	8,855	9,760
40 - 59	10,540	9,690	10,705	10,780	8,945	7,135
60 - 79	12,345	11,575	11,085	11,340	9,605	6,990
80 - 99	--	14,000	9,000	9,670	10,685	7,930
100 or more	10,400	11,000	13,460	9,400	9,480	6,660
STATE AVERAGE	10,445	10,670	10,620	10,480	9,155	7,755

The above table summarizes the density of crowns by acreage size groups. There were some variations in densities within each age group. Relatively higher densities were found in the larger size groups.

CROWNS PER ACRE PLANTED, BY AGE GROUP



ACREAGE PLOWED OUT AND INTENDED FOR HARVEST IN 1978

There were approximately 915 acres of asparagus plowed out in 1976, and about 700 acres plowed out or to be plowed out in 1977.

The southwest district had almost two and one-half times the amount of plowed out acreage in 1976 than the west central district had, even though total asparagus acreage in the two districts are almost equal (less than 2 percent different). Acres plowed out or to be plowed out in 1977 was even more "one-sided" with the southwest district expecting to plow out almost three and one-half times the amount the west central district is planning to plow out.

An attempt was made to determine the acreage expected for harvest in 1978. Survey indications show a total of 17,705 acres, a decrease of less than one-half of one percent from the 1977 acres of harvesting age. The southwest district decreased by 3 percent and the northwest district decreased by 1 percent while the west central district increased by over 2 percent.

ACREAGE PLOWED OUT AND 1978 INTENTIONS

COUNTY AND DISTRICT	Acres of harvesting age	Acres plowed out		Expected for harvest in 1978
		1977	1976	
Leelanau	130	25	5	105
Manistee	120	5	0	140
Other Counties	80	0	0	80
NORTHWEST	330	30	5	325
Mason	315	0	0	350
Muskegon	375	0	5	390
Newaygo	270	0	5	275
Oceana	7,510	150	260	7,650
Other Counties	295	0	0	300
WEST CENTRAL	8,765	150	270	8,965
Allegan	350	10	20	345
Berrien	1,795	110	215	1,725
Cass	950	55	90	895
Kalamazoo	85	15	25	75
Ottawa	245	10	5	245
St. Joseph	415	0	0	415
Van Buren	4,565	315	225	4,435
Other Counties	260	5	60	280
SOUTHWEST	8,665	520	640	8,415
STATE TOTAL	17,760	700	915	17,705

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